

What is claimed is:

✓ 1. A micro array, comprising a stimuable phosphor sheet, and multiple kinds of biomolecules arrayed and fixed on the stimuable phosphor sheet.

5 2. A micro array as defined in Claim 1 wherein the multiple kinds of the biomolecules are fixed on or within a protective layer of the stimuable phosphor sheet.

10 3. A micro array as defined in Claim 1 wherein the multiple kinds of the biomolecules are fixed on or within a phosphor layer of the stimuable phosphor sheet.

✓ 4. A biomolecule analyzing method, comprising the steps of:

i) preparing a micro array, which comprises a stimuable phosphor sheet, and multiple kinds of biomolecules arrayed and fixed on the stimuable phosphor sheet,

ii) bringing a labeled biomolecule, which has been labeled with an energy generating substance, into contact with the micro array to cause the labeled biomolecule to undergo hybridization with a fixed biomolecule, which is among the multiple kinds of the biomolecules arrayed and fixed on the stimuable phosphor sheet,

20 iii) causing the stimuable phosphor sheet to store energy from the energy generating substance, with which the labeled biomolecule having been hybridized with the fixed biomolecule has been labeled,

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iv) exposing the stimuable phosphor sheet, on which the energy from the energy generating substance has been stored, to stimulating rays, which cause the stimuable phosphor sheet to emit light in proportion to the amount of energy stored thereon, and

v) photoelectrically detecting the emitted light, whereby the fixed biomolecule having been hybridized with the labeled biomolecule is detected.

5. A micro array, comprising a stimuable phosphor sheet, and multiple kinds of detecting bodies arrayed and fixed on the stimuable phosphor sheet.

6. A sample analyzing method, comprising the steps of:

i) preparing a micro array, which comprises a stimuable phosphor sheet, and multiple kinds of detecting bodies arrayed and fixed on the stimuable phosphor sheet,

ii) bringing a sample, which contains a plurality of constituents and has been labeled with an energy generating substance, into contact with the micro array to cause a constituent, which is among the plurality of the constituents of the sample and is capable of binding with one of the detecting bodies, to bind with the detecting body,

iii) causing the stimuable phosphor sheet to store energy from the energy generating substance, with which the sample having been bound with the detecting body has been labeled,

iv) exposing the stimuable phosphor sheet, on which

the energy from the energy generating substance has been stored,
to stimulating rays, which cause the stimuable phosphor sheet
to emit light in proportion to the amount of energy stored thereon,
and

- 5 v) photoelectrically detecting the emitted light,
whereby the kind of the detecting body having been bound with
the sample is detected.

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